Start-up/Service Instructions

for use by heating contractor

Vitocell 300-V
EVI Series
Indirect-fired domestic hot water storage tank
53 USG to 120 USG (200 L to 450 L) capacity

Vitocell 300-B
EVB Series
Indirect-fired, dual-coil domestic hot water storage tank
79 and 120 USG (300 and 450 Liter) capacity

VITOCELL® 300-V
VITOCELL® 300-B

Vitocell 300-B Series
EVB Series

Vitocell 300-V Series
EVI Series

Product may not be exactly as shown

IMPORTANT

Read and save these instructions for future reference.

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Please file in Service Binder

Safety, Installation and Warranty Requirements

Please ensure that these instructions are read and understood before commencing installation. Failure to comply with the instructions listed below and details printed in this manual can cause product/property damage, severe personal injury, and/or loss of life. Ensure all requirements below are understood and fulfilled (including detailed information found in manual subsections).

- **Licensed professional heating contractor**
  The installation, adjustment, service and maintenance of this equipment must be performed by a licensed professional heating contractor.

  ▶*Please see section entitled "Important Regulatory and Installation Requirements".*

- **Product documentation**
  Read all applicable documentation before commencing installation. Store documentation near product in a readily accessible location for reference in the future by service personnel.

  ▶*For a listing of applicable literature, please see section entitled "Important Regulatory and Installation Requirements".*

- **Advice to owner**
  Once the installation work is complete, the heating contractor must familiarize the system operator/ ultimate owner with all equipment, as well as safety precautions/requirements, shutdown procedure, and the need for professional service annually before the heating season begins.

- **Warranty**
  Information contained in this and related product documentation must be read and followed. Failure to do so renders the warranty null and void.

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Important Regulatory and Installation Requirements

Instructing the system user

The installer of the system is responsible to ensure the system operator/ultimate owner is made familiar with the system functioning, its activation, and its shut-down. The operator/ultimate owner should also be instructed to complete and mail the warranty registration form in order to be eligible for limited warranty.

▶*The following topics must be covered:*

Proper system operation sequence.
Explain the equipment as well as the need for combustion air. Demonstrate an emergency shut-down, what to do and what not.
Explain that there is no substitute for proper maintenance to help ensure safe operation.

Initial start-up

Initial start-up must be performed by a qualified heating contractor. Completion of the Maintenance Record by the heating contractor is also required.

▶The Maintenance Record is located on page 15 of this manual.

▶Please carefully read this manual prior to attempting installation. Any warranty is null and void if these instructions are not followed.

This product must be installed observing not only the information and instructions provided in the pertinent product literature (see list below), but also all local, provincial/state plumbing and building codes as they apply to this product and all periphery equipment

For information regarding other Viessmann System Technology componentry, please reference documentation of the respective product.

We offer frequent installation and service seminars to familiarize our partners with our products. Please inquire.

Working on the equipment

The installation, adjustment, service, and maintenance of this equipment must be done by a licensed professional heating contractor who is qualified and experienced in the installation, service, and maintenance of hot water heating systems. There are no user serviceable parts on this equipment.

Ensure main power supply to equipment, the heating system, and all external controls has been deactivated. Close main oil or gas supply valve. Take precautions in both instances to avoid accidental activation of power during service work.

▶The completeness and functionality of field supplied electrical controls and components must be verified by the heating contractor. These include low-water cut-offs, flow switches (if used), staging controls, pumps, motorized valves, air vents, thermostats, temperature controls, etc.

Technical literature

Literature applicable to all aspects of the Vitocell:

- Technical Data Manual
- Installation Instructions
- Start-up/Service Instructions
- Operating Instructions and User's Information Manual

▶Leave all literature at the installation site and advise the system operator/ultimate owner where the literature can be found. Contact Viessmann for additional copies.

About These Instructions

Take note of all symbols and notations intended to draw attention to potential hazards or important product information. These include “WARNING”, “CAUTION”, and “IMPORTANT”. See below.

WARNING

Indicates an imminently hazardous situation which, if not avoided, could result in substantial product/property damage, serious injury or loss of life.

▶Warnings draw your attention to the presence of potential hazards or important product information.

CAUTION

Indicates an imminently hazardous situation which, if not avoided, may result in minor injury or product/property damage.

▶Cautions draw your attention to the presence of potential hazards or important product information.

IMPORTANT

▶Helpful hints for installation, operation or maintenance which pertain to the product.

▶

▶This symbol indicates that additional, pertinent information is to be found.

▶This symbol indicates that other instructions must be referenced.

Necessary Tools

Special Items
- Torque wrench

Cleaning supplies
- High pressure washe
- Chemical cleaning liquid
- Cleaning cloth

Parts
- Gasket for inspection opening

CAUTION

Never use a metal brush to clean tank interior or heat exchanger - only plastic material may be used.

Initial Start-up

For initial start-up of the tank, reference the Installation Instructions as well as Operating Instructions and User’s Information Manual of tank.

1. Fill tank with domestic drinking water.
2. Check heating side and domestic water side adaptors for leaks. Tighten if necessary.
3. Ensure that DHW tank temperature sensor is properly inserted into sensor well.
4. Verify proper operation of temperature and pressure relief valve (T&P valve).
5. Activate power supply.

IMPORTANT

Tightening the inspection and clean-out opening is not necessary.

IMPORTANT

Use Loctite 55 pipe sealing compound on all threaded steel nipples on tank.

See Installation Instruction Supplement for fittings supplied with tank.

Service Procedures

Inspection and (if necessary) cleaning of tank must take place within 2 years of initial start-up and as required thereafter.

In the event that the building is unoccupied and not heated and the danger of frost within the structure exists, the tank as well as the heat exchanger coil must be drained.

In case the heating system is filled with an antifreeze (which must be of non-toxic composition), only the tank must be drained of domestic water and all valves in the domestic hot water and domestic cold water piping except for the main fill valve must remain open.

Ensure the DHW recirculation pump is deactivated (if applicable).

Service

1. Shut down heating system

Ensure main power supply to equipment, the heating system and all external controls has been shut down. Take precautions in all instances to avoid accidental activation.

Service

2. Check all connections

1. Check heating side and domestic water side adaptors for leaks. Tighten if necessary.
2. Check sensor well for leaks. Tighten if necessary.

Service

3. Ensure proper operation of all safety devices

Verify proper operation of temperature and pressure relief valve (T&P valve).

Service

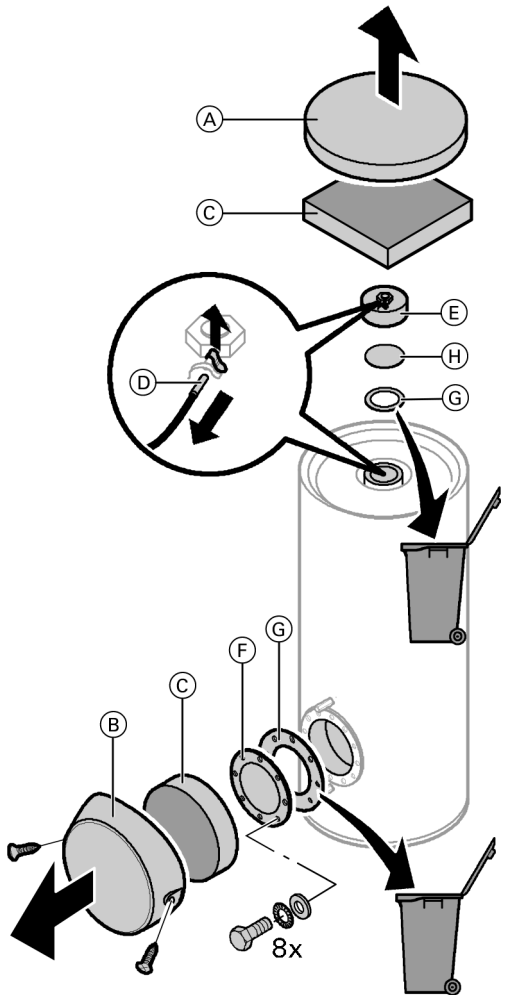
4. Clean outside of tank

Clean tank encloser panel with a commercially available alcohol-based glass cleaning agent and a soft clean cloth.

Service Procedures *(continued)*

Service

5. Clean inside of tank



WARNING

Water being drained may be hot!

IMPORTANT

Cleaning of the Vitocell 300 can be done from either the top (if necessary), or the front inspection port / clean-out opening.

Note: The side cleanout / inspection port applies only to the 79 USG (300 L) and the 120 USG (450 L) tanks.

1. Drain domestic water from DHW tank.
2. Remove top panel Ⓐ and/or front cover Ⓑ, as well as insulation Ⓒ and thermometer sensor Ⓓ.
3. Remove cover Ⓔ, dome cover Ⓗ and gasket Ⓖ, and/or flanged cover Ⓕ.
4. To prevent chemicals from entering piping, disconnect tank from domestic cold water piping system via adaptor.
5. Remove loose build-ups with a pressure washer.
6. Remove stubborn build-ups which are resistant to the pressure washer with a chemical cleaner.
7. Rinse interior of tank thoroughly after use of chemical cleaners.

CAUTION

Never use a metal brush to clean tank interior or heat exchanger - only plastic material may be used.

WARNING

Never use any cleaners containing muriatic acid.
Follow the manufacturer's instructions and warnings when utilizing chemical cleaners for deliming and cleaning devices. Solutions used for cleaning stainless steel equipment in food processing are usually suitable.

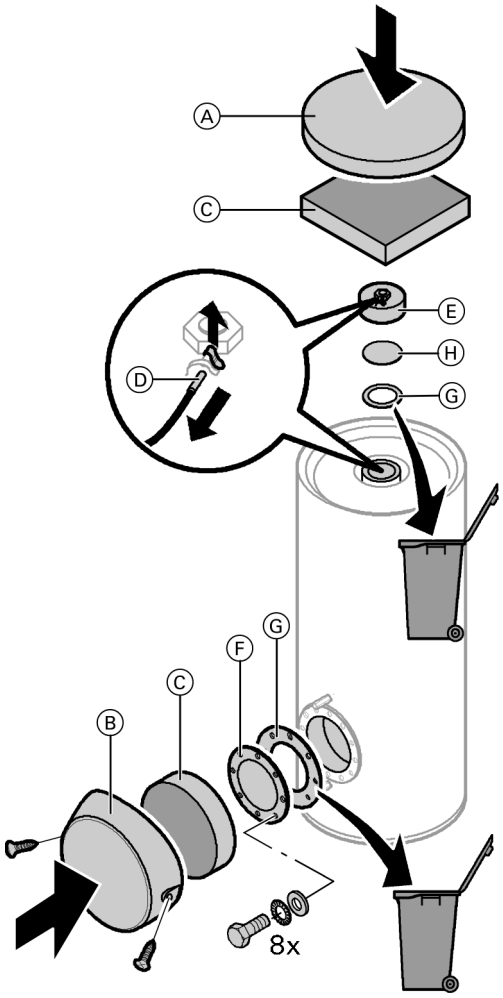
IMPORTANT

The Maintenance Record is found on page 15 of this manual.

Service Procedures *(continued)*

Service

6. Place DHW tank in operation again



1. Reconnect tank to domestic water piping.
2. Replace gasket Ⓖ and dome cover Ⓗ of cover Ⓔ, and gasket Ⓖ of flanged cover Ⓕ (if applicable) with a new seal every time tank is opened.
3. Fasten the cover Ⓔ and the flanged cover Ⓕ using a torque setting of:
   Inspection cover, top - 118 lbf/ft
   Flanged clean-out cover - 30 lbf/ft
4. Fill tank with domestic cold potable water.
5. When the DHW tank is pressurized, tighten flange bolts with a torque setting of 118 lb/ft.
6. Reinstall insulation Ⓒ, thermometer Ⓓ and top panel Ⓐ and/or front cover Ⓑ.
7. Record the completion of these service procedures in the Maintenance Record.
8. Check all connections for leaks. Tighten if necessary.

Service

8. Place system in operation again

Ensure main power supply to equipment, the heating system and all external controls are reactivated.

Vitocell 300-V, EVI Series 53 and 79 USG (200 and 300 Liter)

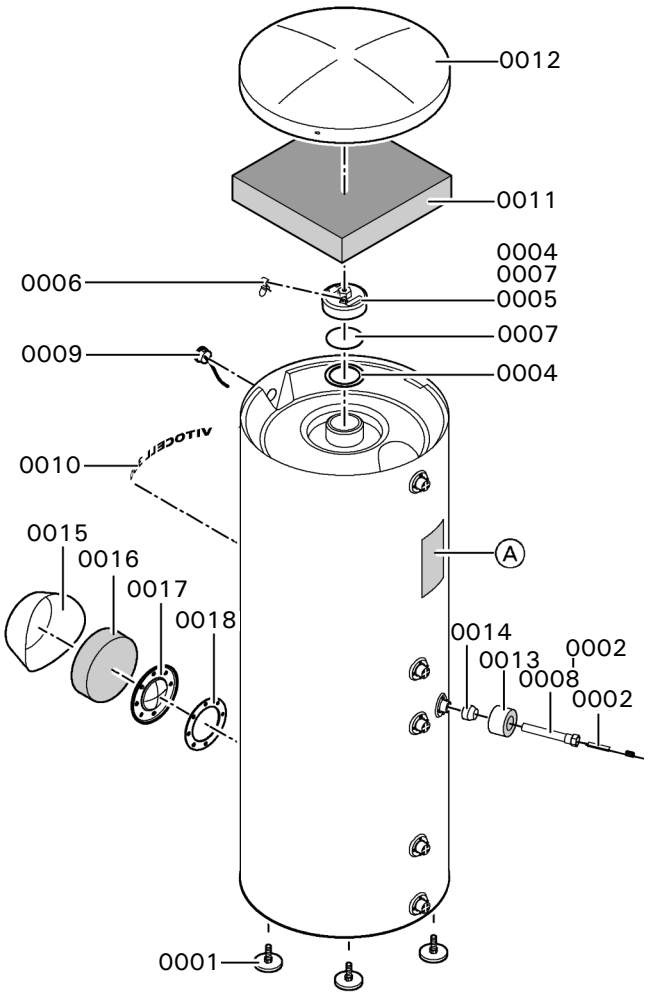
Model No.	Serial No.
200 L (Canada)	7134371□□□□□□□□□
53 USG (USA)	7134381□□□□□□□□□
300 L (Canada)	7134372□□□□□□□□□
79 USG (USA)	7134382□□□□□□□□□

Ordering Replacement Parts:

Please provide tank Model and Serial Number from rating plate when ordering replacement parts. Order replacement parts from your Viessmann distributor.

Parts

0001 Leveling foot
0002 Sensor mounting hardware
0004 Gasket
0005 Tank inspection/clean-out cover (with Pos. 0004 and 0007)
0006 Spring-clip to secure sensor
0007 Dome cover
0008 Sensor well (with Pos. 0002)
0009 Thermometer
0010 Vitocell 300 nameplate
0011 Insulation blanket, top
0012 Top panel
0013 Insulation for sensor well
0014 Reduction coupling
0015 Front cover
0016 Insulation for cover
0017 Flanged cover (with Pos. 0018)
0018 Gasket



Other Parts (not illustrated)

0019 Installation Instructions
0020 Start-up/Service Instructions
0021 Spray paint, vitosilver
0022 Touch-up pen, vitosilver
025 Parts List
026 Operating Instructions and User's Information Manual
050 Temperature and pressure relief valve
051 Installation fittings

Ⓐ Rating plate

Vitocell 300-V, EVI Series 120 USG (450 Liter)

Model No.	Serial No.
120 USG (450 L)	7510404□□□□□□□□□

Ordering Replacement Parts:

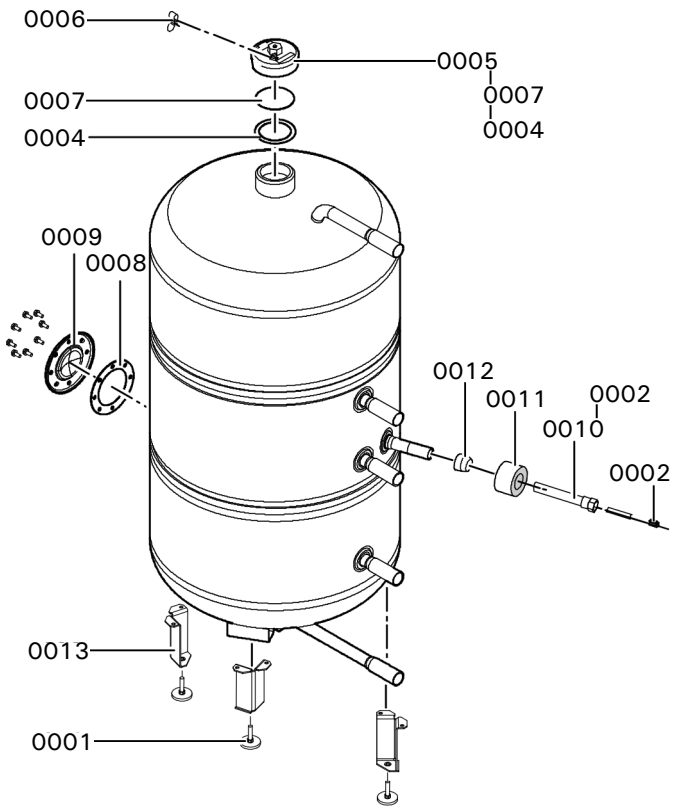
Please provide tank Model and Serial Number from rating plate when ordering replacement parts. Order replacement parts from your Viessmann distributor.

Parts

0001	Leveling foot
0002	Sensor mounting hardware
0004	Gasket
0005	Tank inspection/clean-out cover (with Pos. 0004 and 0007)
0006	Spring-clip to secure sensor
0007	Dome cover (with Pos. 0004)
0008	Gasket
0009	Flanged cover (with Pos. 0008)
0010	Sensor well (with Pos. 0002)
0011	Insulation for sensor well
0012	Reducing coupling
0013	Support leg

Other Parts (not illustrated)

021	Installation instructions
022	Start-up/Service Instructions
023	Operating Instructions and User's Information Manual
032	Parts List
050	Temperature and pressure relief valve
051	Installation fittings



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Vitocell 300-V, EVI Series 120 USG (450 Liter)

Model No.	Serial No.
120 USG (450 L)	7510404□□□□□□□□□

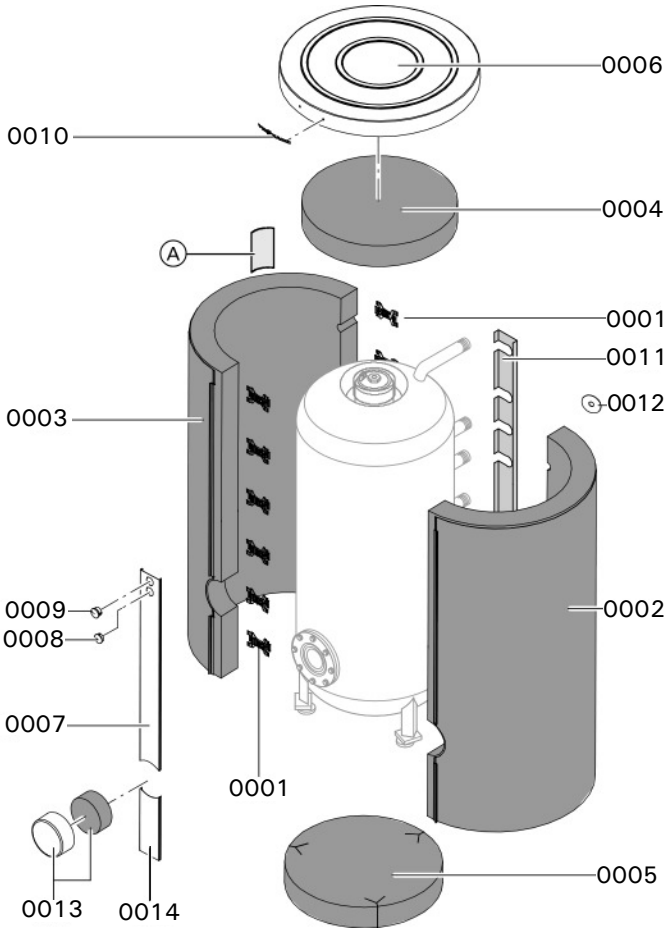
Ordering Replacement Parts:

Please provide tank Model and Serial Number from rating plate when ordering replacement parts. Order replacement parts from your Viessmann distributor.

Parts

0001 Clip closures (x12)
0002 Right side insulation blanket
0003 Left side insulation blanket
0004 Top insulation blanket
0005 Bottom insulation blanket
0006 Top cover
0007 Front upper seam cover
0008 Thermometer blank cover
0009 Thermometer
0010 Viessmann nameplate
0011 Rear seam cover
0012 Rosette (x3)
0013 Front cover with thermal insulation
0014 Front lower seam cover

Ⓐ Rating plate



Vitocell 300-B, EVB Series 79 USG (300 Liter)

Model No.	Serial No.
79 USG (300 L)	7134374□□□□□□□□□
	7134383□□□□□□□□□

Ordering Replacement Parts:

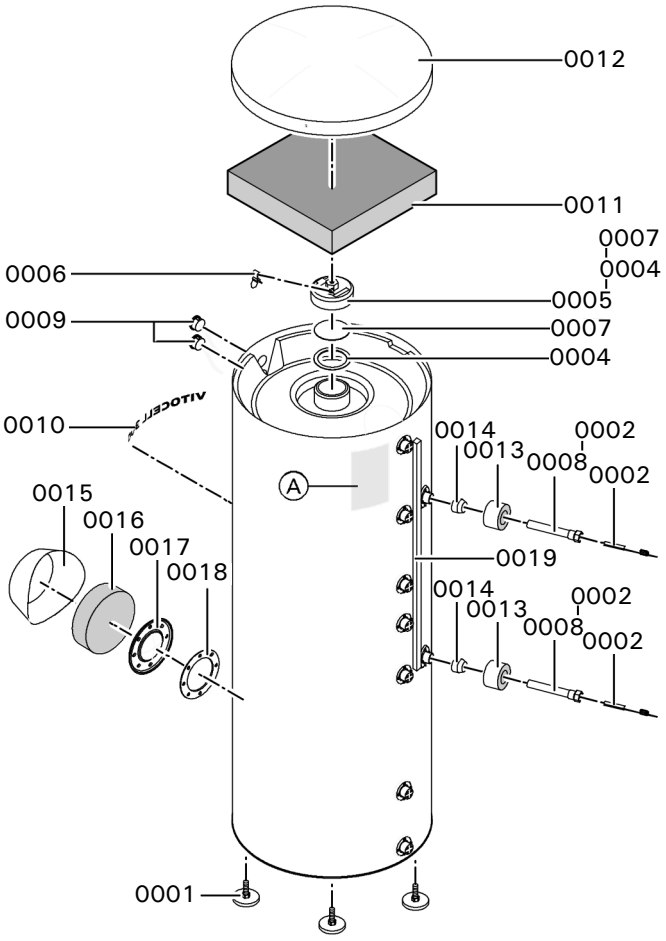
Please provide tank Model and Serial Number from rating plate when ordering replacement parts. Order replacement parts from your Viessmann distributor.

Parts

0001 Leveling foot
0002 Sensor mounting hardware
0004 Gasket
0005 Tank clean-out cover (with Pos. 0007 and 0004)
0006 Spring-clip
0007 Dome cover
0008 Sensor well (with Pos. 0002)
0009 Thermometer
0010 Nameplate Vitocell 300
0011 Insulation blanket, top
0012 Top cover
0013 Insulation, tank sensor well
0014 Reduction coupling
0015 Front cover
0016 Insulation for cover
0017 Flanged cover
0018 Gasket
0019 Cable channel

Other Parts (not illustrated)

100 Installation Instructions
101 Start-up / Service Instructions
102 Operating Instructions and User's Information Manual
104 Installation Instruction Supplement for Installation Fittings
105 Touch-up spray paint, vitosilver
106 Spray paint stick, vitosilver
107 Elbow with sensor well
200 Installation fittings
201 Temperature and pressure relief valve



Vitocell 300-B, EVB Series 120 USG (450 Liter)

Model No.	Serial No.
120 USG (450 L)	7510407□□□□□□□□□□

Ordering Replacement Parts:

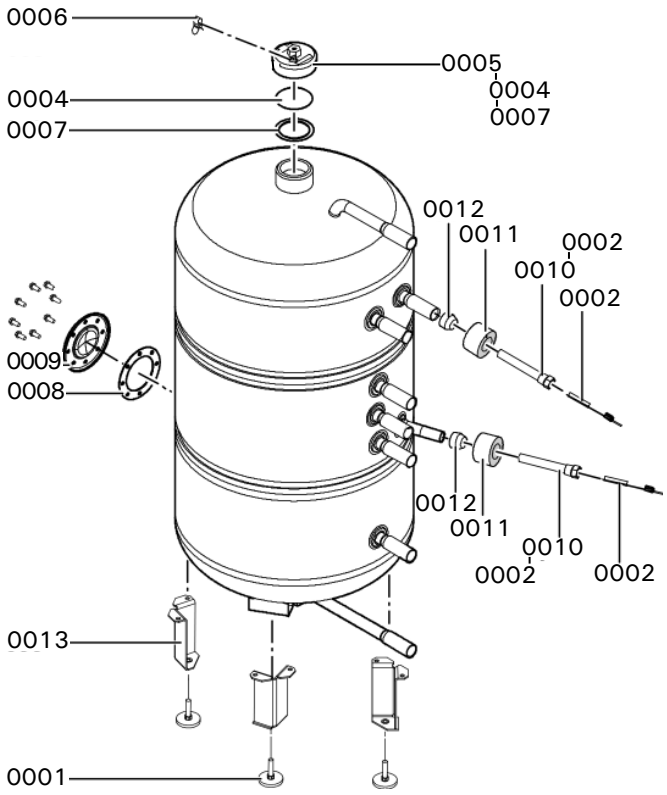
Please provide tank Model and Serial Number from rating plate when ordering replacement parts. Order replacement parts from your Viessmann distributor.

Parts

0001	Leveling foot (each)
0002	Sensor mounting hardware
0004	Gasket
0005	Tank clean-out cover (with Pos. 0007 and 0004)
0006	Spring clip
0007	Dome cover with gasket (010)
0008	Gasket
0009	Flanged cover
0010	Sensor well (with Pos. 0002)
0011	Insulation for sensor well
0012	Reducing coupling
0013	Supporting leg

Other Parts (not illustrated)

100	Installation instructions
101	Start-up/Service Instructions
102	Operating Instructions and User's Information Manual
103	Parts list
104	Installation Instruction Supplement for Installation Fittings
107	Elbow with sensor well
200	Installation fittings
201	Temperature and pressure relief valve



Vitocell 300-B, EVB Series 120 USG (450 Liter)

Model No.	Serial No.
120 USG (450 L)	7510407□□□□□□□□□□

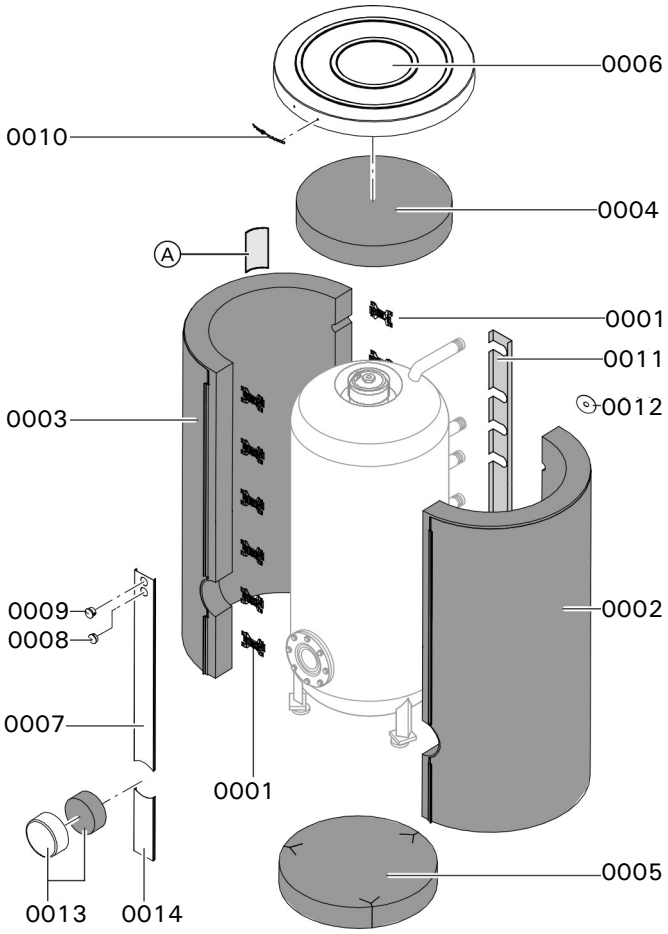
Ordering Replacement Parts:

Please provide tank Model and Serial Number from rating plate when ordering replacement parts. Order replacement parts from your Viessmann distributor.

Parts

0001 Locking straps (x12)
0002 Right side insulation blanket
0003 Left side insulation blanket
0004 Top insulation blanket
0005 Bottom insulation blanket
0006 Top cover
0007 Front upper seam cover
0008 Thermometer
0009 Thermometer
0010 Viessmann nameplate
0011 Rear seam cover
0012 Rosette (x4)
0013 Front cover with thermal insulation
0014 Front lower seam cover

Ⓐ Rating plate



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Maintenance Record

	Start-up	Maintenance/Service	Maintenance/Service	Maintenance/Service	Maintenance/Service
date:					
by:					

	Start-up	Maintenance/Service	Maintenance/Service	Maintenance/Service	Maintenance/Service
date:					
by:					

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Technical information subject to change without notice.

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